

 PRINCIPE FELIPE CENTRO DE INVESTIGACION	FORMULARIO	D100-P-02-F-01
	JOB OFFER	
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Reference: R1.11/2022

Position title: International PhD Student within ITN MSCA Multismart

Group: Polymer Therapeutics and Neuronal and Tissue Regeneration

Job description (function and tasks):

MULTISMART, Multi-component Soft Materials Advanced Research Training Network, is a Doctoral Network of six Universities, one private nonprofit Research Institute, two large Companies and an SME, involving training, fundamental research and applications in the field of molecular soft materials. These have substantial societal and economic impact, but require innovation to ensure sustainable development. The primary research objectives are defined as (i) the innovation in soft materials through multicomponent self-assemblies; (ii) the application of these materials in the formulation of actives with elevated performance in the large scale industries of personal care and home care, as well as high-added value regenerative therapies. Multi-component systems based on low molecular weight gelators have considerable potential to achieve these goals with the key advantages of programmability and responsiveness. However, their development hinges upon the formation of an inter-disciplinary network with well-trained researchers.

MultiSMART proposes: (1) the training of the future generation of researchers; (2) the tight integration between academic projects and private sector needs; (3) a network-wide, seamless multidisciplinary, international and inter-sectoral training that is not available at any one institution. MultiSMART Ph students (DRs) will have the opportunity to become scientists employable in both the industrial and academic sectors. In an integrated approach, the ESR will be trained to bridge the gap between chemistry, physics, biology and formulation technology, as well as to acquire transferable skills through their research and specifically designed network-wide schools and workshops. The participation of three industrial participants in research and training programmes will guarantee extensive inter-sectoral experience for the trainees and maximise the impact of the network.

In particular, DR6 will be trained under the guidance of Dr. Maria J. Vicent (Polymer Therapeutics Lab) and Dr Victoria Moreno Manzano (Neuronal and Tissue Regeneration Lab) at CIPF on the design, synthesis and biological evaluation of Functional star-shaped tripeptides with a fibrillar organization for the treatment of Spinal Cord Injury-SCI. The main objective of this PhD thesis is to develop multifunctional fibers for the treatment of Spinal Cord Injury (SCI) by self-assembly of 1,3,5- benzene tricarboxamide (BTA)-core star-shaped peptides in combination with Stem Cell Therapy. The DR will work on star-shaped-peptides that self-assemble into complex hierarchical nanostructures and networks, as well as in derivatising them with adequate functionalities to modulate rheological properties, or with bioactives. Selected star-shaped peptides will be deeply explored to be formulated as fibers by modulating amino-acid content, counterions and doping elements to also obtain growth media/guidance support with structures required for neuron regeneration. Thus fibers will be biologically evaluated to allow neural precursor stem cells to settle, grow and differentiate adequately into neurons in order to yield SCI regeneration. The selected materials will be evaluated in vivo and -ex vivo in combination with neural precursor stem cells in an acute as well as chronic SCI model.

The selected DR will also perform secondments in different institution including Univ Bordeaux with Dr Del Guerzo to study the structure of these fibers with high-resolution microscopy and transfer knowledge about live cells manipulation, Also in the company Poietis, Viellerobe to perform bio-printing of MultiMat-cell systems (model organoids and/or neural precursor cells).

Research Center description:

The Prince Felipe Research Centre, CIPF, was created to develop first-rate, competitive and internationally relevant research in the fields of Neurobiology, Advanced Therapies, Rare & Genetic Diseases, Molecular Mechanisms of Disease and Computational Genomics. The research centre, located in Valencia, occupies an area of 32,000 m² and it is equipped with the most advanced infrastructures, facilities and technological equipment.

Basic requirements of the position:

- The candidate should have a Bachelor degree in Chemistry, Material Sciences, Pharmacy or Biotechnology.
- High English level spoken and written
- The candidate must not have resided in the country of application for more than 12 months during the 36 months preceding the starting date of the contract.

Merits:

1. Training
 - 1.1. Master in Analytics, Chemistry, Material Sciences, Nanomedicine, Biomedicine
2. Experience. In Polymer Therapeutics
3. Knowledge of Cell biology and Cell therapy
4. Experience in animal experimentation
5. Experience in characterization of materials and self-assembly processes

Valuation criteria:

1. Training - 15%
 - a. Academic Qualifications - 5%
 - b. Complementary Training - 10%
2. Experience. Polymer Therapeutics. - 20%
3. Knowledge of material sciences and self-assembly processes - 20%
4. Experience in cell therapy and/or cell biology - 20%
5. Other considerations: Certificate of disability (equal to or greater than 33%), being a victim of gender violence - 5%.
6. Interview - 20%

Contract

- Professional category: Predoctoral researcher R1
- Salary Level: In agreement with the ITN MSCA criteria:
 - Living allowance €37.250,4/year (includes annual gross salary + social security)
 - Mobility allowance of €7,200/year
 - Family allowance where applicable

- Funding Source/Project: **HORIZON-MSCA-2021-DN-01-01 (Proposal no: 101072585, MULTISMART)**



- Duration: 3 years
- Starting date: 1/06/2023
- Working day: Full-time (40 hours per week)
- The deadline for receipt of resumes will be open until 11th April 2023

Selection process:

The system will consist in the following phases:

- 1) Phase of compliance with the requirements established in the call. Only candidates with the essential requirements will be considered.
- 2) Merit valuation phase.
- 3) Interview phase (The 3 candidates with the highest score in the merit phase will go to the interview phase)

The selected candidates will go to the interview phase.

The members of the Selection Committee receive continuous training in equality issues.

Working conditions:

The CIPF promotes equal treatment and opportunities between women and men, which should be considered a fundamental aspect of the CIPF's labor relations and human resources management.

The CIPF is committed to reconcile a work and family life of its employees and are offering the possibility to benefit from flexible working hours.

The CIPF is committed to complying with the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers (EU Charter & Code) by developing its human resources strategy for researchers (HRS4R) and through its open, transparent, and merit-based recruitment policy (OTM-R).



HR EXCELLENCE IN RESEARCH

¿How to present your candidacy?

Interested candidates should send their CV, cover letter and references.

The CV should remove all personal references: gender, age, marital status, nationality and should not include a photograph.

Please indicate the offer reference number in the subject field. If you have any questions about this offer, please contact the Human Resources Department by email to: recursoshumanos@cipf.es

Basic and detailed information on the processing of personal data

Personal data controller: The data subject is informed that the VALENCIAN COMMUNITY FOUNDATION PRÍNCIPE FELIPE RESEARCH CENTER (hereinafter CIPF), with address at C / D 'Eduardo Primo Yúfera, number 3, 46012 Valencia, contact telephone number 963 289 680 and contact email address info@cipf.es is the responsible for the treatment of the data that you communicate to us in relation to this offer.

Users and data subjects may contact the data protection officer at the following email address: privacy@cipf.es

Legal basis and purposes for processing and storing your personal data: With legal basis in the consent that you grant us with the voluntary communication (i) of personal data; (ii) of those required in this offer as well as in your curriculum vitae and; (iii) where appropriate, from the information provided through the interviews and tests, all the data will be processed in order to store them in the CIPF employment exchange and contact the interested person to send the corresponding communications in the selection process opened through this offer. All personal data will be treated as one more element to be evaluated for decision-making related to the selection for the job, without any decision being made based solely on the automated processing of the data. Likewise, once the selection process for the position offered is completed, except for the exercise of the right of opposition by the interested person, all the personal data indicated will be processed by the CIPF, with legal basis in the legitimate interest of the CIPF, to store them in their employment exchange and have a network of contacts for science and research, in order to contact the person concerned about offers, selection processes and recruitment of personnel that may arise in the future.

Recipients of the data: Personal data will not be communicated to third parties, except legal obligation.

Personal data processors: Third parties in charge of the treatment may process the data of the interested person to provide services to the CIPF, following the instructions of the aforementioned Center, after signing a contract for the treatment with sufficient guarantees of security and confidentiality.

International transfers: They do not exist.

Data conservation period: The data will be kept by CIPF until the deadlines provided in the current regulations are completed, it is for the attention of possible responsibilities and legal obligations.

Exercise of rights regarding the processing of your personal data: The data subject can exercise his/her rights to request access, rectification, deletion, opposition, limitation to treatment, portability and not be subject to a decision based solely on the automated processing of personal data. In particular, the data subject can exercise his/her right to object

to the processing of their personal data based on the legitimate interest of the CIPF. You also have the right to withdraw consent at any time, without affecting the legality of the treatment based on the consent prior to its withdrawal. For the exercise of these rights, the data subject can send a request to CIPF indicating the right they exercise and providing a double-sided photocopy of their ID or legal identification document of their identity, to any of the following addresses:

Postal: C / D 'Eduardo Primo Yúfera, number 3, 46012 Valencia Email: info@cipf.es

Likewise, the data subject is informed of the right to request the tutelage of the Spanish Agency for Data Protection C / Jorge Juan, 6, 28001 Madrid, 901100099 - 912663517 (www.agpd.es) in particular, when you consider that the data have not been obtained in satisfaction of your rights.

Prior to filing that request, you can contact CIPF through the data protection officer privacy@cipf.es.